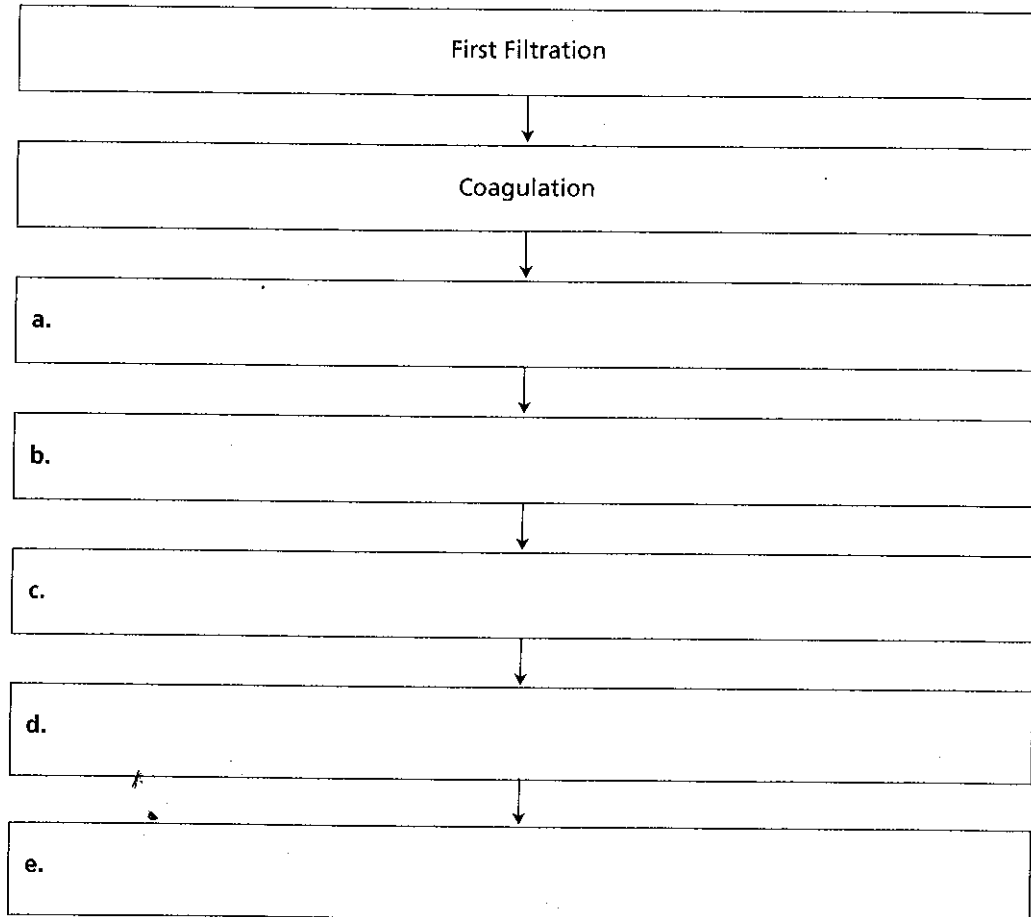


**Freshwater Resources** ▪ *Guided Reading and Study***Water to Drink**

*This section describes sources of drinking water, how drinking water is treated to make it safe, and how water is distributed to homes and businesses. The section also describes how wastewater is treated so that it can be returned safely to the environment.*

**Use Target Reading Skills**

*As you read, make a flowchart that shows the steps of drinking-water treatment.*

**Drinking-Water Treatment****Introduction**

1. Circle the letter of each choice that is an important source of drinking water in the United States.  
a. reservoirs                      b. rivers  
c. oceans                          d. lakes
2. People in less-populated areas of the United States often get their drinking water from \_\_\_\_\_.
3. How do large communities maintain public water supplies?  
\_\_\_\_\_  
\_\_\_\_\_

**Freshwater Resources** ▪ *Guided Reading and Study*

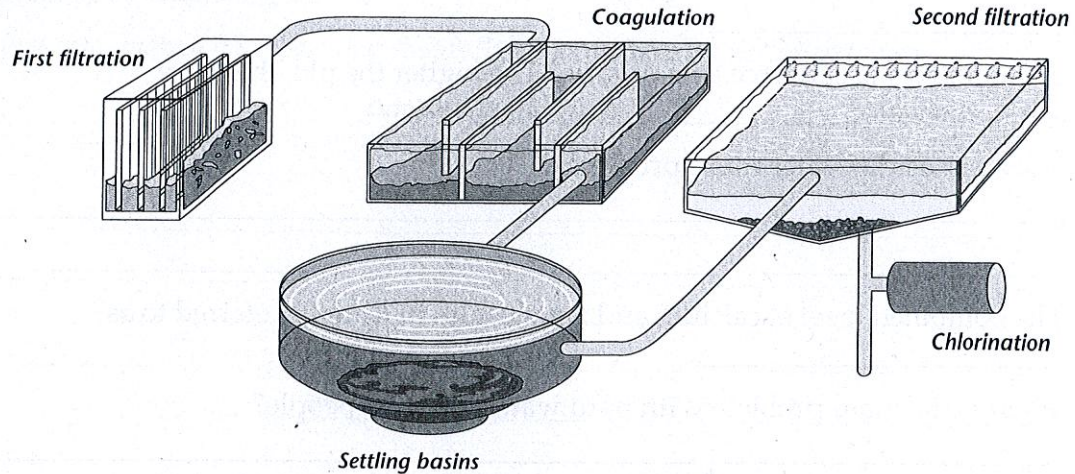
**Water Quality**

4. A measurement of those substances in water other than water molecules is referred to as \_\_\_\_\_.
5. Is the following sentence true or false? The pH of water is a measurement of how acidic or basic the water is.  
\_\_\_\_\_
6. Is the following sentence true or false? The higher the pH, the more acidic the water. \_\_\_\_\_
7. How can acidic water cause problems?  
\_\_\_\_\_  
\_\_\_\_\_
8. The combined level of calcium and magnesium in water is referred to as \_\_\_\_\_.
9. What is the main problem with hard water for most people?  
\_\_\_\_\_  
\_\_\_\_\_
10. What does the coliform count measure?  
\_\_\_\_\_  
\_\_\_\_\_
11. Is the following sentence true or false? A high coliform count may indicate that the water contains more than one kind of disease-causing organism. \_\_\_\_\_
12. The amount of one substance in a certain volume of another substance is called \_\_\_\_\_.
13. Is the following sentence true or false? EPA water-quality standards allow drinking water to contain only water molecules.  
\_\_\_\_\_



**Freshwater Resources** ▪ *Guided Reading and Study***Water to Drink** (*continued*)**Treating Drinking Water**

14. Add arrows to the drawing to show the direction in which water moves through a water treatment plant.



15. When alum is added to water, sticky globs, or \_\_\_\_\_, form.  
Match the step in the water treatment process with its description.

Step	Description
____ 16. filtration	a. Water is treated to create flocs.
____ 17. coagulation	b. Water is treated to kill microorganisms.
____ 18. chlorination	c. Water is passed through screens to remove objects.

19. Circle the letter of the choice that shows the correct sequence that water follows after it has been treated.
- a. Small pipes, central pumping station, water mains
  - b. Central pumping station, water mains, small pipes
  - c. Water mains, small pipes, central pumping station
  - d. Central pumping station, small pipes, water mains
20. What causes the water to move through a community's system of underground water pipes?
- \_\_\_\_\_

**Freshwater Resources** ▪ *Guided Reading and Study*

**Treating Wastewater**

21. Sewage is carried away from many homes by a network of pipes called \_\_\_\_\_.

22. Complete the table.

**Wastewater Terms**

Term	What It Means
a.	Wastewater and the different kinds of wastes that it contains
b.	Deposits of fine solids that settle out from wastewater in a septic system
c.	Treated wastewater that you cannot drink

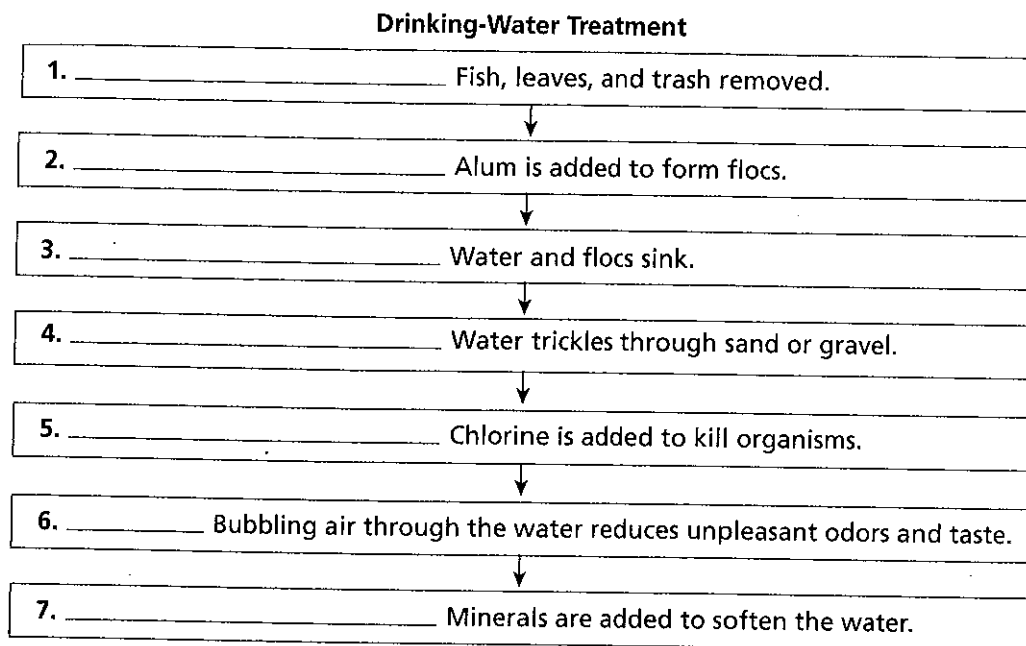
23. An underground tank containing bacteria that treat wastewater is called a(n) \_\_\_\_\_.

24. The area of ground in a septic system that the water filters through is called a(n) \_\_\_\_\_.

## Freshwater Resources ▪ Review and Reinforce

**Water to Drink****Understanding Main Ideas**

Complete the flowchart by filling in the spaces with the names of the steps.

**Building Vocabulary**

Match each term with its definition by writing the letter of the correct definition on the line beside the term in the left column.

\_\_\_\_\_ 8. filtration

\_\_\_\_\_ 9. concentration

\_\_\_\_\_ 10. pH

\_\_\_\_\_ 11. hardness

\_\_\_\_\_ 12. water quality

\_\_\_\_\_ 13. sewage

\_\_\_\_\_ 14. coagulation

a. a measurement of how acidic or basic a substance is

b. wastewater and the different kinds of wastes in it

c. forming of heavy clumps

d. the total amount of calcium and magnesium in water

e. process of passing water through a series of screens that allow the water to pass, but not solid particles

f. the amount of one substance in a certain volume of another substance

g. the measurement of substances in water other than water molecules